

**Date:** December 16, 2014

**To:** Thomas J. Bonfield, City Manager  
**Through:** W. Bowman Ferguson, Deputy City Manager  
**From:** Donald F. Greeley, Director, Water Management  
**Subject:** Award of Construction Contract for the North Durham Water Reclamation Facility Generator Improvements

### **Executive Summary**

The North Durham Water Reclamation Facility (NDWRF) treats approximately 50% of the City's wastewater. The City has relied on a dual power feed from Duke Energy for the continuous and uninterrupted power feed. In the last decade there have been two events in which this method of backup power failed during major storm events. City staff, in consultation with Hazen and Sawyer, determined that providing City owned and operated backup power generation was a more reliable method for protecting the City's critical systems from power failures.

The NDWRF Generator Improvements general construction contract was advertised for public bids on September 26, 2014. The City opened public bids on October 29, 2014. Four bids were received, and Crowder Construction Company is recommended for the general construction contract as the lowest cost, responsible, responsive bidder.

### **Recommendation**

The Department of Water Management recommends that the City Council:

1. Authorize the City Manager to execute a general construction contract with Crowder Construction Company for the North Durham Water Reclamation Facility Generator improvements project in the total amount of \$3,775,200.00;
2. Establish a contingency fund for the contract of \$377,000.00;
3. Authorize the City Manager to negotiate change orders for the contract provided that the cost of all change orders does not exceed \$377,000.00 and the total project cost does not exceed \$4,152,200.00;
4. Authorize the City Manager to execute an Encroachment Agreement with North Carolina Department of Transportation for access for the proposed installation, maintenance, removal and operation of the steel casing pipe and electrical conduit necessary for the work.

### **Background**

The North Durham WRF (NDWRF) discharges treated effluent to Ellerbe Creek that ultimately reaches Falls Lake. The plant is required, as part of its discharge permit, to provide adequate means of backup power in the event of a primary utility power failure. The City has met this requirement by having a second power feed to the plant. The second power feed has proven unreliable at critical times during the last ten years. In the last decade two events occurred at the plants in which the primary and secondary power feeds failed simultaneously. These events presented significant risks to Ellerbe Creek and Falls Lake of large unlawful discharges and the City determined that alternative means of backup power were necessary. As part of the facility master plan prepared in 2012, the

consulting engineer and City evaluated our critical assets and designed the improvements necessary to improve the reliability of the NDWRF electrical backup power system.

### Issues/Analysis

The general construction contract was advertised on September 26, 2014. The following four bids were received on October 29, 2014.

Bidder	Contract Price
<b>Crowder Construction Co.</b>	\$3,775,200.00
<b>Bitting Electric</b>	\$3,995,120.00
<b>East Coast Construction</b>	\$4,226,940.00
<b>Via Electric</b>	\$4,030,200.00

Review of the bids deemed all bidders responsive and responsible, and based on the final contract price, Crowder Construction Co. is recommended.

### Alternatives

Not executing a contract with Crowder Construction Company – The construction is critical to the City's ability to meet its regulatory requirements and operate the plant reliably. This alternative would jeopardize the City's ability to maintain plant operations in the event of a power failure.

### Financial Impacts

This project is funded in the CIP Wastewater Process Rehab Capital Improvement Project. See below for further information.

Capital Project	Account Code	Amount
Wastewater Process Rehabilitation	4100P767-731000-P251S	\$ 3,775,200.00
Wastewater Process Rehabilitation	4100P767-731900-P251S	\$ 377,000.00

### SDBE Summary

The Equal Opportunity/Equity Assurance Department reviewed the bid submitted by Crowder Construction Co., Apex, NC and have determined that they are in compliance with the Ordinance to Promote Equal Business Opportunities in City contracting.

### SDBE REQUIREMENTS

Firm	ID	City/State	Amount	% of Contract
Busy Black Trucking	MSDBE	Durham, NC	\$4,800.00	0.13%

The goals for this project were: 1% M/SDBE and 0 % W/SDBE. Crowder Construction Co. failed to attain the required M/SDBE goals or demonstrate good faith effort. Following an appeal hearing, this contract was recommended for award in the best interest of the City of Durham subject to City Council approval. Further, Crowder has agreed to increase their M/WSDBE participation with the use of additional M/WSDBE firms as follows:

Firm	ID	City/State	Amount	% of Contract
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Certified Concrete	WSDBE	Raleigh, NC	\$33,295	0.90%
Skyrock Construction	MSDBE	Raleigh, NC	\$49,319	1.3%
Graymac Electric Supply	MSDBE	Kernersville, NC	\$47,452	1.26%

Crowder has agreed that their post-bid participation should increase their overall percentages to: 2.69% M/SDBE and 0.90% for W/SDBE participation. Workforce statistics for Crowder Construction Co., Apex, NC are as follows:

Total Workforce	333	
Total Females	19	5%
Total Males	314	95%
Black Males	29	9%
White Males	204	61%
Other Males	81	24%
Black Females	2	1%
White Females	15	4%
Other Females	2	1%

#### **Attachments**

Certified Bid Tab  
Contract Agreement Form  
NCDOT encroachment agreement